

<b>Boralex Stratton Energy, Inc.</b>	)	<b>Department</b>
<b>Franklin County</b>	)	<b>Findings of Fact and Order</b>
<b>Stratton, Maine</b>	)	<b>Part 70 Air Emission License</b>
<b>A-368-70-A-I</b>	)	

After review of the Initial Part 70 License application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

## **I. Registration**

### **A. Introduction**

FACILITY	Boralex Stratton Energy (BSE)
LICENSE NUMBER	A-368-70-A-I
LICENSE TYPE	Initial Part 70 License
SIC CODES	4911
NATURE OF BUSINESS	Electrical power generation
FACILITY LOCATION	Route 27, Stratton, Maine
DATE OF LICENSE ISSUANCE	October 24, 2000
LICENSE EXPIRATION DATE	October 24, 2005

### **B. Emission Equipment**

The following emission units are addressed by this Part 70 License:

<b>EMISSION UNIT ID</b>	<b>UNIT CAPACITY</b>	<b>UNIT TYPE</b>
Boiler 1	672.0 MMBtu/hr	Wood fired boiler
Diesel Unit #1	3.33 MMBtu/hr	Emergency Generator
Diesel Unit #2	1.37 MMBtu/hr	Emergency Fire Pump
Propane Unit #1	0.78 MMBtu/hr	Emergency Generator

BSE has additional insignificant activities not listed in the emission equipment table above, but can be found in the application submitted in July of 1996.

### **C. Application Classification**

The application for BSE does not include the licensing of increased emissions or the installation of new or modified equipment; therefore the license is considered to be an Initial Part 70 License issued under Chapter 140 of the Department's regulations for a Part 70 source.

## **II. EMISSION UNIT DESCRIPTION**

### **A. Boiler 1**

Boiler 1 is a Combustion Engineering, model VU-40 boiler, manufactured in 1988 and installed in 1989 with a maximum design heat input capacity of 672.0 MMBtu/hr. The boiler is wood fired and uses #2 fuel oil for startup and flame stabilization. Boiler 1 is subject to the provisions of NSPS requirement 40 CFR Part 60, Subpart Db.

BSE also uses off-spec fiber from Cascades Auburn Fiber, Inc. as a replacement fuel for wood fired in Boiler #1.

BSE also incorporates the clarifier waste cake from the filter press into the fuel pile.

The operation and maintenance of a multiple centrifugal cyclone separator followed by an electrostatic precipitator (ESP) are used to control particulate emissions from Boiler 1. BSE shall operate, at a minimum, the number of ESP chambers and number of fields per chamber that operated during the most recent demonstration of compliance with the licensed particulate emission limits.

A continuous emissions monitoring system (CEMS) is used at BSE to demonstrate compliance with NO<sub>x</sub> and CO emission rates. A continuous opacity monitor (COM) is used to demonstrate compliance with opacity requirements. An oxygen (O<sub>2</sub>) CEM is used to measure diluent oxygen in Boiler 1 emissions.

### **Streamlining**

1. 40 CFR Part 60.43b(c)(1), (f), (g) and MEDEP Regulations Chapter 103 regulate particulate matter (PM). However, Best Practical Treatment (BPT) in the current license is more stringent.
2. MEDEP Regulations Chapter 106 regulates fuel sulfur content, however the 40 CFR Part 60.42b(j) sulfur limit is more stringent.
3. MEDEP Chapter 101 is applicable for visible emissions. However, 40 CFR Part 60.43b(f) and BPT in the current license is more stringent.

### **Periodic Monitoring**

Stack testing for particulate matter emission rates once every two years.

Fuel oil record keeping which includes records of fuel use through purchase receipts indicating the amount (gallons) and percent sulfur by weight. If the percent sulfur of the fuel oil is not available from the supplier, an analysis of the fuel oil may be taken and tested to determine the sulfur content (Reference 40 CFR Part 60.42b(j)(1) and Appendix A, Method 19).

Electrostatic Precipitator (ESP) primary and secondary voltages and currents shall be recorded as periodic monitoring for particulate matter emissions.

Documentation that the NO<sub>x</sub> CEM is continuously accurate, reliable and operated in accordance with Chapter 117, 40 CFR Part 51 Appendix P, and 40 CFR Part 60 Appendices B and F.

Demonstrated NO<sub>x</sub>, CO and opacity limits through CEM, periodic monitoring and COM data provides reasonable assurance the VOC emission limits are being met.

#### **B. Diesel Unit 1**

Diesel Unit 1 is a 475 HP unit with a maximum design heat input capacity of 3.33 MMBtu/hr firing diesel fuel with a maximum sulfur content of 0.05% by weight. This unit is not subject to NSPS requirements.

### **Streamlining**

1. Chapter 106 regulates fuel sulfur content, however the BPT sulfur limit in the current license is more stringent.
2. Chapter 101 is applicable for visible emissions, however the BPT opacity limit in the current license is more stringent.

### **Periodic Monitoring**

Fuel oil record keeping which includes records of hours of operation and fuel use through purchase receipts indicating the amount (gallons) and percent sulfur by weight. If the percent sulfur of the fuel oil is not available from the supplier, an analysis of the fuel oil may be taken and tested to determine the sulfur content (sample and analyze IAW 40 CFR Part 60 Appendix A, Method 19, Section 5.2.2).

Based on the type and amount of fuel for which the diesel was designed and operating in a manner consistent with good pollution control practices, it is unlikely the diesel unit will exceed opacity limits. Therefore, periodic monitoring by the source for opacity in the form of visible emission testing in accordance with 40 CFR Part 60, Appendix A, Method 9 is not required. However, neither the EPA nor the state is precluded from performing its own testing and may take enforcement action for any violations discovered.

C. Miscellaneous Emissions Units

Miscellaneous emission units include the following: A 196 HP diesel fired fire pump and a 80 kW propane fired emergency generator.

**Streamlining**

Chapter 101, Section 2(C) is applicable for visible emissions; however, the BPT opacity limit is more stringent.

**Periodic Monitoring**

Periodic monitoring shall consist of record keeping which includes records of fuel use through purchase receipts indicating amount (gallons) and percent sulfur by weight (documented through supplier fuel receipts) for the diesel fire pump. If the percent sulfur of the fuel oil is not available from the supplier, an analysis of the fuel oil may be taken and tested to determine the sulfur content (sample and analyze IAW 40 CFR Part 60 Appendix A, Method 19, Section 5.2.2).

Based on the type and amount of fuel for which the diesel and propane units were designed an operating in a manner consistent with good pollution control practices, it is unlikely the diesel unit or propane unit will exceed opacity limits. Therefore, periodic monitoring by the source for opacity in the form of visible emission testing in accordance with 40 CFR Part 60, Appendix A, Method 9 is not required. However, neither the EPA nor the state is precluded from performing its own testing and may take enforcement action for any violations discovered.

D. General Process Sources

Wood chippers, conveyors and transfer points shall be covered or enclosed. Any conveyor totally within a building shall be considered enclosed.

### **Periodic Monitoring**

Based on best management practices, it is unlikely the of fugitive emission sources will exceed the opacity limits. Therefore, periodic monitoring for opacity in the form of visible emissions is not required. However, neither the EPA nor the state is precluded from performing its own testing and may take enforcement action for any violations discovered.

#### **E. Fugitive Emissions**

Fugitive particulate matter sources at BSE, include material stockpiles and roadways.

### **Periodic Monitoring**

Based on best management practices and wetting roads and storage piles with water when appropriate, it is unlikely the fugitive emission sources will exceed the opacity limits. Therefore, periodic monitoring for opacity in the form of visible emission is not required. However, neither the EPA nor the state is precluded from performing its own testing and may take enforcement action for any violations discovered.

#### **F. Degreaser Units**

The degreaser units are small, one person stations. One is located in the addition to the service building and the other is located in the Power Plant. Both units utilize a non-hazardous material.

### **Periodic monitoring**

Periodic monitoring for the degreaser units shall consist of record keeping including records of solvent added and removed.

#### **G. Facility Emissions**

The following total licensed annual emissions for the facility are based on the following raw materials used. All usages are based on a 12 month rolling total.

- Boiler #1 wood use of 654,080 tons per year (4,500 Btu/lb, 50% moisture, or equivalent).
- Boiler #1 waste fiber use of 138,583 tons per year.
- Boiler #1 clarifier waste cake use of 100 tons per year.
- Boiler #1 fuel oil use of 4,204,800 gallons per year of #2 fuel oil (0.25% sulfur by weight) or a lesser amount of #2 fuel oil with a total sulfur equivalence (0.5% maximum).

- Boiler #1 waste oil use of 5,000 gallons per year.
- Emergency Generator #1 fuel use of 4,892 gallons per year of diesel fuel (0.05% sulfur by weight).
- Diesel fire pump fuel use of 11,892 gallons per year of diesel fuel (0.05% sulfur by weight).
- Emergency Generator #2 fuel use of 4,148 gallons per year of liquid propane.

(all based on a 12 month rolling total)

**Total Allowable Annual Emissions for the Facility**  
(used to calculate the license fee)

<b>Pollutant</b>	<b>Tons/Year</b>
PM	97.4
PM <sub>10</sub>	97.4
SO <sub>2</sub>	101.4
NO <sub>x</sub>	930.3
CO	1777.6
VOC	206.9

### **III. AIR QUALITY ANALYSIS**

Stratton Energy previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this Initial Part 70 License. Result of the analysis are located in license A-368-71-C-A/R.

### **ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-368-70-A-I, subject to the following conditions:

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only.**

## STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emission units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license;
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140;
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both;
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request; **Enforceable by State-only**
- (5) The licensee shall pay the annual air emissions license fee to the Department, calculated pursuant to Title 38 MRSA §353;
- (6) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;
- (7) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions;  
(40 CFR §60.11(d))
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;

- (9) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license.
- (10) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.
- (11) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license;
- (12) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (a) perform stack testing under circumstances representative of the facility's normal process and operating conditions:
    - (i) within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring, or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;
    - (ii) to demonstrate compliance with the applicable emission standards; or
    - (iii) pursuant to any other requirement of this license to perform stack testing.
  - (b) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emissions testing; and
  - (c) submit a written report to the Department within thirty (30) days from the date of test completion.

**Enforceable by State-only**

- (13) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:



- (a) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
- (b) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there where intervening days during which no violation occurred or that the violation was not continuing in nature; and
- (c) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on a interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

**Enforceable by State-only**

- (14) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.  
(40 CFR §60.11(g))
- (15) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:
  - (a) Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
  - (b) The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any

violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to section 114 of the CAA.

- (16) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license.
- (17) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next working day, whichever is later, of such occasions and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;
- (18) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.
- (19) The licensee shall submit quarterly reports of any required monitoring as required by the Department. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.
- (20) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequent if specified in the Applicable requirement by the Department. The compliance certification shall include the following:
  - (a) The identification of each term or condition of the Part 70 license that is the basis of the certification;
  - (b) The compliance status;
  - (c) Whether compliance was continuous or intermittent;

- (d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
  - (e) Such other facts as the Department may require to determine the compliance status of the source;
- (21) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:
- (a) Additional Applicable requirements under the CAA become applicable to the Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;
  - (b) Additional requirements (including excess emissions requirements) become applicable to the Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
  - (c) The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms of conditions of the Part 70 license; or
  - (d) The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

- (22) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading, or other similar programs or processes for changes that are provided for in the Part 70 license.

### **SPECIAL CONDITIONS**

- (23) Permit Shield for Non-Applicable Requirements

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated July 8, 1996.

	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
a.	Boiler #1	40 CFR Parts 72 and 74	Acid Rain Provisions	Stratton Energy is exempt from the Acid Rain program.
b.	Boiler #1	40 CFR Part 60.45(j)	Compliance and performance test methods and procedures for sulfur dioxide.	Stratton Energy only burns very low sulfur #2 fuel oil and obtains fuel receipts as described in 40 CFR 60.49b(r).
c.	Boiler #1	40 CFR Part 60.44b(c)	There is no NSPS NO <sub>x</sub> limit if the affected facility has an annual capacity factor less than 10% for oil firing in combination with firing wood.	Boiler #1 has an annual capacity factor less than 10% for firing oil.
d.	Diesel Unit #2	Chapter 103, Section 2(B)(4)(c)	Particulate emission limit for fuel burning equipment $\geq 3.0$ MMBtu/hr.	Not applicable, unit is $< 3.0$ MMBtu/hr.
e.	Propane Unit #1	Chapter 103, Section 2(B)(4)(c)	Particulate emission limit for fuel burning equipment $\geq 3.0$ MMBtu/hr.	Not applicable, unit is $< 3.0$ MMBtu/hr.

(24) Boiler 1

A. Boiler 1 steam production shall be limited to 500,000 #/hr over an 8 hour period. BSE shall monitor and record steam flow rate and steam temperature continuously for Boiler #1. Note, “continuously” is defined as: Equally spaced data points with at least one data point for each successive 15 minute period. A minimum of three evenly spaced data points constitutes a valid hour.

The Steam Flow and Steam Temperature monitors must record accurate and reliable data. If the parameter monitor is recording accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

[MEDEP Chapter 140, BPT]

- B. The maximum heat input capacity from oil in Boiler #1 when firing #2 fuel oil for boiler start-up and flame stabilization shall not exceed 140.0 MMBtu/hr (1000 gal/hr). The flow rate shall be recorded hourly by a Distributed Control System (DCS).

[MEDEP Chapter 140, BPT]

- C. Emissions from Boiler 1 shall not exceed the following limits when firing wood and/or oil:

<b>Pollutant</b>	<b>lb/MMBtu</b>	<b>Origin and Authority</b>
PM	0.03	MEDEP Chapter 140, BPT
PM <sub>10</sub>	0.03	MEDEP Chapter 140, BPT
NO <sub>x</sub>	0.30	MEDEP Chapter 140, BPT
CO	0.60	MEDEP Chapter 140, BPT

NO<sub>x</sub>: The 0.30 lb/MMBtu limit is based on a 24-hour daily block average, via CEM. A 24-hour block average shall be defined as midnight to midnight. BSE shall maintain the NO<sub>x</sub> CEM in accordance with Chapter 117. The CEM shall meet the monitoring requirements of 40 CFR Part 60.13 as well as 40 CFR Part 60, Appendices B and F.

[MEDEP Chapter 140, BPT]

CO: The 0.60 lb/MMBtu limit is based on a 24-hour block average via CEM. BSE shall maintain the CO CEM in accordance with Chapter 117. A 24-hour block average shall be defined as midnight to midnight. The CEM shall meet the monitoring requirements of 40 CFR Part 60.13 as well as 40 CFR Part 60, Appendices B and F.

[MEDEP Chapter 140, BPT]

- D. Lb/hr emissions from Boiler 1 shall not exceed the following limits:

<b>Pollutant</b>	<b>lb/hour</b>
PM	20.2
PM <sub>10</sub>	20.2
SO <sub>2</sub>	35.5
NO <sub>x</sub>	201.6
CO	403.2
VOC	47.0

PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC: Lb/hr limits are on a one (1) hour average and shall be demonstrated upon request by a stack test in accordance with this license.

[MEDEP Chapter 140, BPT]

- E. Boiler #1 shall be equipped with an oxygen (O<sub>2</sub>) CEM that meets the criteria of 40 CFR Part 60, Appendix B, Performance Specification 3.  
[MEDEP Chapter 117]
- F. Emissions from Boiler 1 shall vent to Stack 1 which shall be at least 290 feet AGL and represent at least 100% of the formula GEP stack height.  
[MEDEP Chapter 140, BPT]
- G. Particulate matter (PM, PM<sub>10</sub>) emissions from Boiler 1 shall be controlled by the operation and maintenance of a multiple centrifugal cyclone separator followed by an electrostatic precipitator (ESP).

BSE shall operate, at a minimum, the number of ESP chambers and number of fields per chamber that operated during the most recent demonstration of compliance with the licensed particulate emission limits. Data for the following points in the ESP shall be recorded once per day during operation:

- 1) Primary and secondary voltages on each field
- 2) Primary and secondary current on each field

[MEDEP Chapter 140, BPT]

Upon written notification to the Department, and in accordance with the Bureau of Air Quality's Air Emission Compliance Test Protocol, BSE may perform additional particulate emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall BSE be relieved of its obligation to meet its licensed emission limits.

[MEDEP Chapter 140, BPT]

- H. BSE shall operate Boiler 1 such that the opacity does not exceed 20% over a six minute average except for one six minute period per hour of not more than 27%, subject to the provisions of Title 38 MRSA §349.  
[MEDEP Chapter 140, BPT]
- I. Compliance with the opacity limit shall be demonstrated by means of a continuous opacity monitoring system (COM). The COM shall be installed and certified on the breaching of the ESP to the stack. BSE shall maintain the COM in accordance with Chapter 117.  
[MEDEP Chapter 140, BPT]
- J. Boiler 1 is subject to 40 CFR Part 60 Subparts A and Db and BSE shall comply with the notification and record keeping requirements of 40 CFR Part 60.7.

40 CFR Part 60 Subpart Db requires maintaining records of the amount of each fuel combusted each day and calculation of annual capacity factor individually for wood and oil for each semiannual period. BSE shall maintain monthly fuel use records and determine an annual capacity factor on a 12 month rolling average basis with a new annual capacity calculated at the end of each calendar month.

[MEDEP Chapter 140, BPT]

- K. BSE shall limit the annual fuel usage and quarterly feed rate (based on purchase records which quantify the type and quantity of fiber) into Boiler #1 to 138,583 tons per year of off-spec waste fiber (as fired).

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

- L. BSE shall limit the quantity of clarifier waste cake burned in Boiler #1 to 100 tons per year (as fired). Compliance is based on recording the quantity of waste cake incorporated into the fuel pile on a 12 month rolling total.

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

- M. #2 Fuel oil and waste oil use in Boiler #1 shall not exceed 3,000 gallons/3-hour period, 24,000 gallons/day, nor 4,204,800 gallons/year (12-month rolling total) with a maximum sulfur content of 0.25% or a lesser amount of #2 fuel oil with a total sulfur equivalence (0.5% maximum). This annual fuel use requirement ensures BSE meets the <10% capacity factor for oil.

Fuel flow monitors shall be operated and maintained to demonstrate compliance. Fuel oil sulfur content compliance shall be determined using receipts indicating the percent sulfur by weight or fuel oil analysis.

If the percent sulfur of the fuel oil is not available from the supplier, an analysis of the fuel oil may be taken and tested to determine the sulfur content (Reference 40 CFR Part 60.42b(j)(1) and Appendix A, Method 19).

[MEDEP Chapter 140, BPT]

- N. BSE may burn no more than 5,000 gallons per year of waste oil in Boiler #1.

Only waste oil meeting the criteria “specification” or “off-specification” waste oil (as defined in the “Waste Oil Management Rules”) shall be burned in Boiler 1.

A log shall be maintained recording the quantities of specification and off-specification waste oil burned in Boiler 1 and shall be made available to the Department upon request.

[MEDEP Chapter 140, BPT]

- O. Ash from Boiler 1 grate and flyash shall be disposed of in accordance with the Bureau of Remediation and Waste Management (BRWM). Ash shall be sufficiently conditioned with water or transported in covered (or enclosed) containers so as to prevent fugitive emissions.

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

- P. Should wind action or handling of reclamation of wood chips result in visible emissions in excess of 5% opacity, the chips shall be controlled to eliminate visible emissions in excess of 5% opacity on a six (6) minute average.

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

(25) Diesel Generator #1

- A. Diesel Generator #1 shall not exceed a heat input rate of 3.33 MMBtu/hr of diesel fuel.

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

- B. A log documenting the dates, times and reason of operation for the generator shall be kept.

- C. Emissions from Diesel Generator #1 shall not exceed the following limits:

<b>Pollutant</b>	<b>lb/hr</b>	<b>Lb/MMBtu</b>
PM	0.40	0.12
PM10	0.40	n/a
SO2	0.17	n/a
NOx	14.69	n/a
CO	3.16	n/a
VOC	1.17	n/a

- D. The sulfur content of the diesel fuel used in Diesel Generator #1 shall not exceed 0.05% sulfur by weight. Fuel oil logs shall be kept which include records of fuel use through purchase receipts indicating gallons and percent sulfur by weight. BSE may deplete their current stock of diesel fuel for Diesel Generator #1 as of the date of this license. Any further



diesel fuel purchases for Diesel Generator #1 shall not exceed 0.05% sulfur by weight.

If the percent sulfur of the diesel fuel is not available from the supplier, an analysis of the fuel oil may be taken and tested to determine the sulfur content (sample and analyze IAW 40 CFR Part 60 Appendix A, Method 19, Section 5.2.2).  
[MEDEP Chapter 140, BPT]

- E. Diesel Generator #1 shall not operate for more than 500 hours per year and shall not fire more than 11,892 gallons per year of diesel fuel per year based on a 12 month rolling total. Fuel use records for the Diesel Generator shall be kept through purchase receipts indicating gallons and percent sulfur by weight.  
[MEDEP Chapter 140, BPT]

- F. Visible emissions shall not exceed an opacity of 20% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.  
[MEDEP Chapter 140, BPT]

- (26) Preventative Maintenance Log  
A log for Boiler 1 shall be maintained showing preventative maintenance actions being performed.  
[MEDEP Chapter 140, BPT] **Enforceable by State Only**

A log for the Diesel Generator shall be maintained showing preventative maintenance actions being performed.  
[MEDEP Chapter 140, BPT]

- (27) General Process Sources  
All wood conveyors and transfer points shall be covered or enclosed. Visible emissions from any general process source (including chippers) shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than 1 six minute block average in a 1 hour period.  
[MEDEP Chapter 140, BPT]

- (28) Fugitive Emissions  
Potential sources of fugitive PM emissions, including material stockpiles and unpaved roadways, shall be controlled by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 10% opacity, based on a 3 minute block average.  
[MEDEP Chapter 140, BPT]

(29) Parts Washer

Facility shall label the parts washer with operational standards, equip the washer with cover if vapor pressure >15 mmHg at 100°F, close cover when not in use, drain parts for 15 seconds or longer, shall not degrease porous material, keep drafts < 40 m/minute, repair leaks, and keep records of solvent added and removed.

[MEDEP Chapter 130]

(30) Miscellaneous Emission Units

Emission Unit	Origin and Authority	Requirement Summary
Propane Emergency Generator #1	Chapter 101, Section 2(A), Chapter 140, BPT	Visible emissions shall not exceed an opacity of 20 percent on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period
Emergency Diesel Fire Pump #2	Chapter 101, Section 2(A), Chapter 140, BPT	Visible emissions shall not exceed an opacity of 30 percent on a six (6) minute block average basis, for no more than two (2) six (6) minute block averages in a 3-hour period

(31) Propane Emergency Generator #1

Propane Emergency Generator #1 shall be limited to 500 hours per year of operation (4,148 gallons of propane) based on a 12 month rolling total. Hours of operation records shall be kept through purchase receipts indicating gallons.

A log documenting the dates, times and reason of operation for the generator shall be kept.

[MEDEP Chapter 140, BPT]

(32) Emergency Diesel Fire Pump #2

Emergency Diesel Fire Pump #2 shall be limited to 500 hours per year of operation (4,892 gallons of fuel), firing 0.05% sulfur (documented through supplier fuel records) #2 fuel oil, based on a 12 month rolling total. Hours of operation and fuel use records for the emergency diesel fire pump shall be kept through purchase receipts indicating gallons and percent sulfur by weight.

If the percent sulfur of the diesel fuel is not available from the supplier, an analysis of the fuel oil may be taken and tested to determine the sulfur content (sample and analyze IAW 40 CFR Part 60 Appendix A, Method 19, Section 5.2.2).

A log documenting the dates, times and reason of operation for the fire pump shall be kept.

[MEDEP Chapter 140, BPT]

- (33) **Stack Testing** [MEDEP Chapter 140, BPT]
- A. All stack testing programs shall comply with all of the requirements of the MEDEP Compliance Test Protocol and with 40 CFR Part 60, as appropriate, or other methods approved by the MEDEP and EPA to test.
  - B. BSE shall conduct particulate matter testing and demonstrate compliance with emission standards once every two years on Boiler #1.

- (34) **Units Containing Ozone Depleting Substances**
- When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs.
- [40 CFR, Part 82, Subpart F]

- (35) **CEMS, COMS, and Parameter Monitors**
- The CEMS, COMS, and parameter monitors required by this license shall be the primary means of demonstrating compliance with emission standards set by this Order, statute, state or federal regulation, as applicable. Stratton Energy shall comply with the following: [MEDEP Chapter 140, BPT]

- A. **Performance Specifications** [MEDEP Chapter 117]
  - All CEMS and COMS shall meet the sampling and performance criteria specified in 40 CFR Part 51 Appendix P, and shall be operated in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations.
  - 1. If the continuous emission monitoring system for the gaseous emissions is recording accurate and reliable data less than 90% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the CEMS was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.
  - 2. If the continuous opacity monitoring system is recording accurate and reliable data less than 95% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and

may include in that enforcement action any period of time that the continuous emission monitoring system was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction so the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

3. Conduct Relative Accuracy Testing (RATA) and/or Performance Audits in accordance with Chapter 117 of the Department's regulations.
4. Develop and maintain an updated quality assurance plan for all CEMS and COMS in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations.

**B. Recordkeeping** [MEDEP Chapter 117 and Chapter 140, BPT]

For all of the continuous emission monitoring (CEMS), continuous opacity monitor (COM), equipment parameter monitoring and recording, required by this license, the licensee shall maintain records of the most current six year period and the records shall include:

1. Documentation which shows monitor operational status during all source operating time, including specifics for calibration and audits; and
2. A complete data set of all monitored parameters as specified in this license. All parameter records shall be made available to the Bureau of Air Quality upon request.
3. For all CEMS and COM, the records shall include:
  - a. Documentation that all CEMS and COM are continuously accurate, reliable, and operated in accordance with Chapter 117, 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F;
  - b. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS, as required by 40 CFR Part 51 Appendix P;
  - c. Upon the written request by the Department a report or other data indicative of compliance with the applicable emission standard for those periods when the CEMS or COMS were not in operation or produced invalid data. Methods allowed by 40 CFR Part 75 may be used to demonstrate compliance with applicable emission standards. Evidence indicating normal operations shall constitute such reports or other data indicative of compliance with applicable emission standards. In the event the Bureau of Air Quality does not concur with the licensee's compliance determination, the licensee shall, upon the Bureau of Air Quality's request, provide additional data, and shall have the burden of demonstrating that the data are indicative of compliance with the applicable standard; and
  - d. A 24-hour block average shall be calculated as the arithmetic average of not more than 24 one-hour block periods. Only one 24-hour block

average shall be calculated for one day, beginning at midnight. A valid 24-hour block average must contain at least 12 hours during which operation occurred. Hours in which no operation occurs shall not be included in the 24-hour block average calculation.

**C. Quarterly Reporting**

The licensee shall submit a Quarterly Report to the Bureau of Air Quality and EPA within 30 days after the end of each calendar quarter, detailing the following for the parameter monitors, Continuous Emission Monitoring Systems (CEMS), or Continuous Opacity Monitoring Systems (COMS) required by this license:

1. All control equipment downtimes and malfunctions;
  2. All CEMS or COMS downtimes and malfunctions;
  3. All parameter monitor downtimes and malfunctions;
  4. All excess events of emission and operational limitations set by this Order, Statute, state or federal regulations, as appropriate. The following information shall be reported for each excess event:
    - a. Standard exceeded;
    - b. Date, time, and duration of excess event;
    - c. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and printouts when requested;
    - d. A description of what caused the excess event;
    - e. The strategy employed to minimize the excess event; and
    - f. The strategy employed to prevent recurrence.
  5. A report certifying there were no excess emissions, if that is the case.
- [MEDEP Chapter 117]

**(36) Semiannual Reporting**

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due with every other quarterly report, and the initial semiannual report is due April 30, 2001 with the second quarterly report submitted following the date of signature of this license.

A. Each semiannual report shall include a summary of the periodic monitoring required by this license. The periodic monitoring required by this license is as follows:

1. Hourly fuel oil flow into Boiler 1
2. Quantity of each fuel burned in Boiler 1 each day (wood, oil, waste oil, off-spec waste fiber)
3. Daily Primary and Secondary ESP voltages
4. Daily Primary and Secondary ESP currents
5. Boiler 1 particulate matter stack testing results
6. Quantity of fuel burned in the generators and fire pump (diesel and propane)

- 7. #2 fuel oil sulfur content
- 8. Diesel fuel oil sulfur content
- B. Each semiannual report shall include the annual capacity factor of Boiler 1 for each fuel.
- C. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.  
[MEDEP Chapter 140]

**(37) Annual Compliance Certification**

Stratton Energy shall submit an annual compliance certification to the Department and EPA in accordance with Condition (20) of this license. The initial annual compliance certification is due October 30, 2001 with the submittal of the second semiannual report after the signature date of this license.  
[MEDEP Chapter 140]

**(38) Annual Emission Statement**

The licensee shall annually report to the Department, in a specified format, fuel use, operating rates, use of materials and other information necessary to accurately update the State's emission inventory.  
[MEDEP Chapter 137]

- (39)** The licensee is subject to the State regulations listed below.

<u>Origin and Authority</u>	<u>Requirement Summary</u>
Chapter 102	Open Burning
Chapter 109	Emergency Episode Regulation
Chapter 110	Ambient Air Quality Standard
Chapter 116	Prohibited Dispersion Techniques

**(40) Certification by a Responsible Official**

All documents and reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official.  
[MEDEP Chapter 140]

<b>Boralex Stratton Energy, Inc.</b>	)	<b>Department</b>
<b>Franklin County</b>	)	<b>Findings of Fact and Order</b>
<b>Stratton, Maine</b>	)	<b>Part 70 Air Emission License</b>
<b>A-368-70-A-I</b>	<b>23</b>	

(41) The term of this license shall be five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS       DAY OF       2000.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
       MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: July 08, 1996

Date of application acceptance: July 08, 1996

Date filed with the Board of Environmental Protection \_\_\_\_\_

This Order prepared by Mark E. Roberts, Bureau of Air Quality.